AMERICAN ACADEMY *of* ACTUARIES

Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
U.S. House of Representatives

Hearing on
"Pennsylvania Medical Liability Insurance Crisis"

Statement of James Hurley, ACAS, MAAA
Chairperson, Medical Malpractice Subcommittee
American Academy of Actuaries

February 10, 2003

The American Academy of Actuaries is the public policy organization for actuaries practicing in all specialties within the United States. A major purpose of the Academy is to act as the public information organization for the profession. The Academy is non-partisan and assists the public policy process through the presentation of clear and objective actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also develops and upholds actuarial standards of conduct, qualification and practice and the Code of Professional Conduct for all actuaries practicing in the United States.

1100 Seventeenth Street NW Seventh Floor Washington, DC 20036 Telephone 202 223 8196 Facsimile 202 872 1948
www.actuary.org

INTRODUCTION

The American Academy of Actuaries appreciates the opportunity to provide comments on issues related to the availability and pricing of medical malpractice insurance. The Academy hopes these comments will be helpful as the subcommittee considers related proposals.

This testimony provides some facts about medical malpractice financial results updated through 2001, contributing factors, and some common misconceptions about the results. Additionally, we provide ratemaking information.

Then and Now

During the 1990s, the medical malpractice insurance line of business experienced favorable operating results primarily due to favorable development of prior coverage years and healthy investment returns. Insurers offering this line of coverage in the 1990s competed aggressively. Healthcare providers shared in the benefit of improved loss experience and higher levels of investment income through stable or even decreasing premium charges. Specialty companies have had a substantial market share for this line of business because it has been considered a high-risk type of insurance, which requires specialists to underwrite policies and administer claims.

Recently, however, the cost of medical malpractice insurance has been rising. Rate increases have been precipitated in part by the growing size of claims, more frequent claims in some areas, and higher defense costs. The decline in expected future bond yields exacerbates the need for rate increases.

From a financial standpoint, medical malpractice insurance results deteriorated significantly during the last three years ending in 2001. One measure of financial results is the combined ratio – the ratio of all incurred losses and expenses to premium. For all companies reporting to A.M. Best (an organization offering comprehensive data to insurance professionals), the combined ratio of 130 percent and 134 percent in 1999 and 2000, respectively, deteriorated to 153 percent in 2001. Results for 2002 are not yet available, however, preliminary A.M. Best projections for 2002 are for a combined ratio slightly under 140 percent. This means insurers are expected to pay out $1.40 in losses and expenses for every dollar of premium they collect.

A measure of the overall profitability of insurers is the operating ratio. The A.M. Best operating ratio adjusts the combined ratio for other expense and income items, primarily investment income, with the exception of federal income tax. The operating ratio for 1999 and 2000 was approximately 106 percent, indicating a net loss of six cents on every dollar of premium. This deteriorated to 134 percent in 2001, indicating a loss of 34 cents on every dollar of premium. Considering the lower investment income return likely to be achieved by insurers in 2002, the 2002 operating ratio will probably not improve as much as the combined ratio. At these levels, 2001 and 2002 results are the worst they have been in 15 years or more, approximating levels of the 1980s. State insurance laws regulate the type of allowable investments for insurers and these laws have fairly low limits on the amount of equity investments permitted.

Today, the loss environment has deteriorated, the benefits of favorable reserve development appear to be gone, and the expected future investment income has declined. As a result, rates for both insurers and reinsurers need to increase to properly align with current loss and investment income levels. Companies failing to do this jeopardize their surplus base and financial health. Counter to what some

may perceive, the investment results I have mentioned are based on a portfolio that is dominated by bonds with equity investments representing a minority of the portfolio.

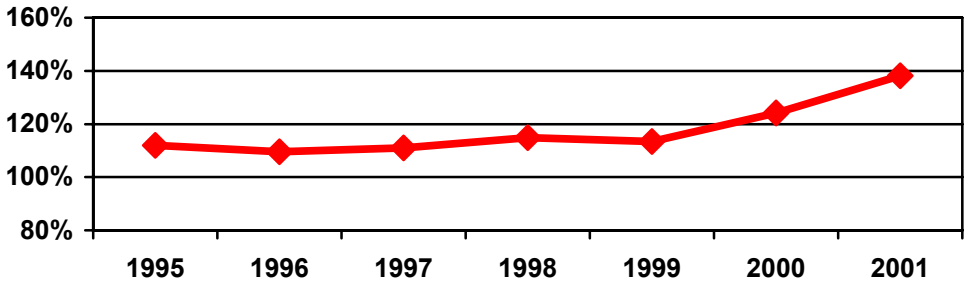
SOME FACTS

The following discussion is based on results of 30 companies (the Group), primarily physician-owned and/or -operated medical liability insurers. Notably, these results exclude St. Paul and other commercial insurers, as well as MLMIC, the latter primarily a writer insuring New York state physicians. These results represent more than one-third of the exposure reported to A.M. Best. Information is shown for the last seven years ending 2001 because 2002 results have not been reported.

Results for these companies reflect a four percent after-tax operating profit in 2000. However, the results deteriorate to a 10 percent operating loss for 2001.

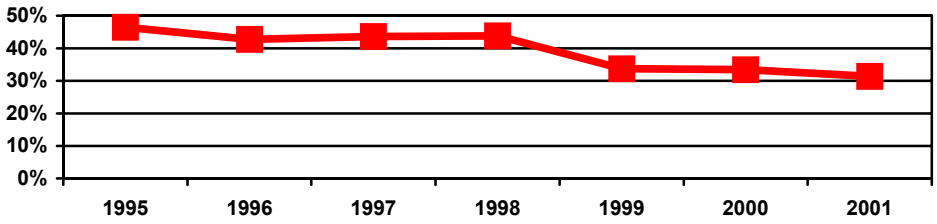
The following is a discussion and charts summarizing the two key drivers of financial results and their effects on operating results and surplus:

CHART A: COMBINED RATIO



Driver #1 – Higher combined ratio (defined here as all incurred loss and expenses to premium earned). The combined ratio deteriorated by ten points in 2000 and a further 14 points in 2001. The ratios were 124 percent and 138 percent in 2000 and 2001, respectively. The preceding five years reflect a rather stable 110–115 percent range. The driver of the poorer experience in 2000 and 2001 is the deterioration in the loss and loss adjustment expense ratio, because the underwriting expense ratio has remained relatively constant. The earlier years reflect the benefit of significant reserve reductions from prior coverage years.

CHART B: INVESTMENT INCOME AS A PERCENTAGE OF PREMIUM DECLINES



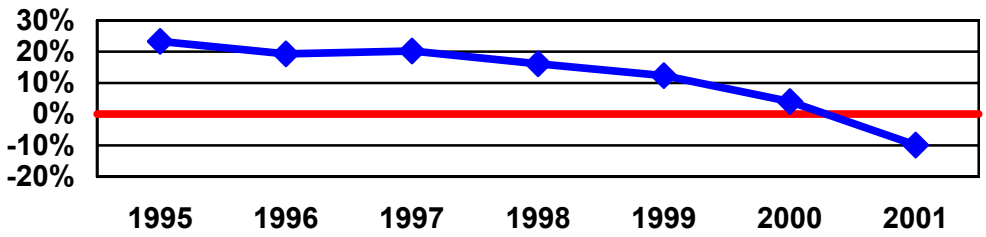
Driver #2 – Decreased investment income (shown here as pre-tax investment income divided by premium earned). As shown in Chart A, these insurers generally spend more money on loss and expense than they collect in premium. This is possible because investment income can offset a modest underwriting loss.

In Chart B, pre-tax investment income is divided by earned premium to estimate the amount by which the underwriting combined ratio can be offset by investment income. This percentage has declined from the mid-40s in the early years, to the mid-30s in 1999, and in 2001, to 31 percent. This "offset"

will continue to decline in the future. Most insurance company invested assets are in bonds, which are affected by the current lower yield environment. Overall yields going forward will be less than they were in the past.

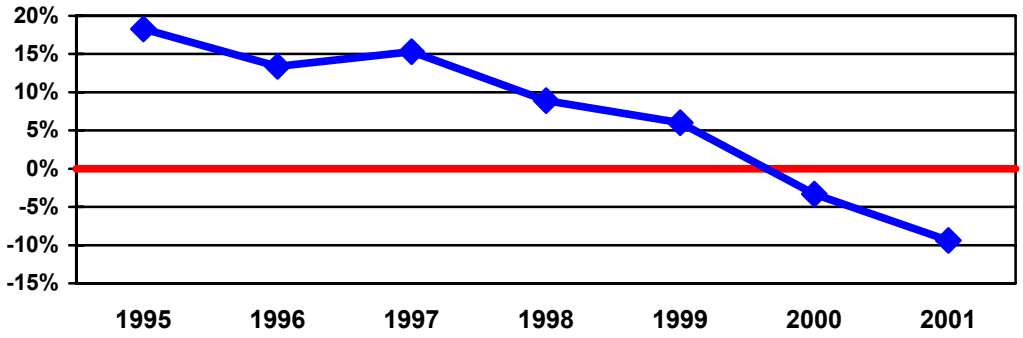
Effect #1 – Net operating income falls (shown in Chart C as a percentage of premium). Net operating income represents the net impact of the combined ratio and investment income ratio, adjusted for other income statement items (primarily policyholder dividends, miscellaneous other income, and federal income tax). The strong operating returns of the early years have been followed by the slight 2000 profit and 10 percent loss for 2001 described earlier.

CHART C: CALENDAR YEAR OPERATING RESULTS TURN NEGATIVE



Effect #2 – Chart D shows the percentage change in surplus from one year to the next. Surplus represents the capital base for these insurers, and its decline in 2000 and 2001 reduces their capacity to write new or renewing business prospectively, and lessens their ability to absorb adverse loss developments on business written in prior years.

CHART D: SURPLUS CHANGE TURNS NEGATIVE



CONTRIBUTING FACTORS

There are several factors contributing to the financial results described in Chart D. It is probably best to note the factors contributing to the favorable results of the early and mid-1990s and then discuss the changes in these factors today.

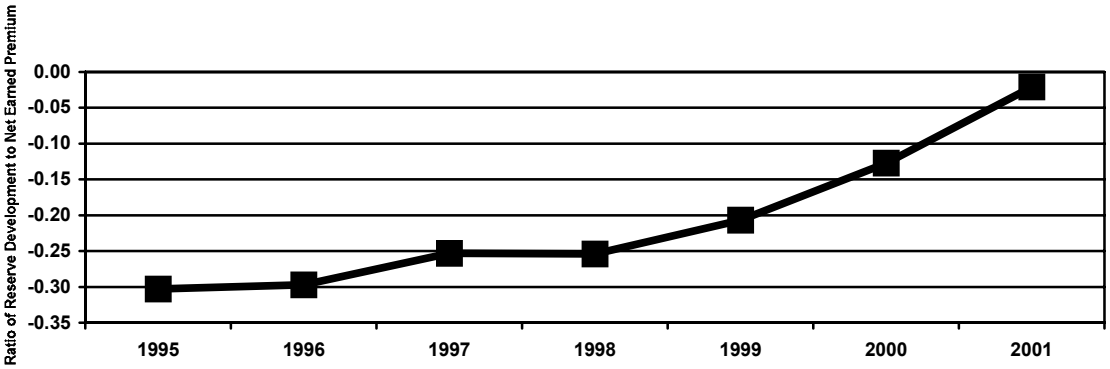
Factor #1: Throughout the 1990s, premium rates for the insurance industry as a whole were relatively flat or down in several states. Rates decreased toward the middle and end of the period in comparison to rates at the beginning of the decade. Note that the final price charged is a function of several different items, including the filed rate and premium discounts.

Factor #2: Loss-cost trends (the annual change in the frequency and severity of claims) during this time period were relatively low. Long-term indications suggest a low single-digit change, three percent to five percent, varying from state to state. Rates established at the beginning of the period contemplated higher trends. Companies responded to this emerging data in different ways. Some held rates stable and paid policyholder dividends or gave premium discounts. Some reduced filed rates. Others found they

needed to increase rates modestly and tried to refine pricing models to improve the equity of their program costs. Many insurers employed combinations of these, with resulting increases in some programs and decreases in others, depending on specific facts and circumstances. However, in general, there was a decline in the adequacy of premiums during this period. Collected rates came into line with insurers' costs, but competitive actions pushed rates even lower in some jurisdictions.

Factor #3: Ultimate losses for accident years in the late 1980s and early 1990s ultimately were lower than originally projected. Evidence of this emerged gradually over a period of years as claims settled. When loss reserves for prior years are reduced, it contributes income to the current calendar years, improving financial results (i.e., the combined and operating ratios). That was the pattern during the middle to late 1990s, as shown in Chart E. What is evident from that chart is that favorable reserve development was not a significant factor in 2001 for these companies. In contrast, the total medical malpractice line of business increased reserves in 2000 and even more significantly in 2001.

CHART E: LOSS RESERVE AS A PERCENTAGE OF PREMIUM



Factor #4: During the 1990s, there was a real spread between returns on fixed-income investments and

economic inflation. In addition, returns on the Group's modest equity investments contributed to produce significant investment gains, improving overall financial results. These gains increased the investment income ratio (see earlier graph) and improved the operating ratio.

Factor #5: Given the financial results of the early-to-mid-1990s, some companies considered expansion into new markets (although they may have had limited information to develop rates), became more competitive in existing markets, and offered more aggressive premium discounts. In most jurisdictions, "discounts" against the manual premium became common, reducing the actual premiums paid by health care providers. As a consequence, market prices decreased.

Factor #6: Loss-cost trends, particularly claim severity, began to increase toward the latter part of the 1990s. The number of large claims increased, but even analyses designed to eliminate the distorting effects of very large claims began to show a significant increase. This, coupled with the cumulative effect of the low loss-cost trend and rate activity in the earlier part of the decade, produced rate indications that were increasing rapidly in many states.

Factor #7: In 2001, there was little favorable loss reserve development or "good news" from prior coverage years, although results varied on a company-by-company basis. By comparison, total industry medical malpractice results reflected adverse or unfavorable loss development (defined as approximately 20 percent of premium) in 2001. The increase in loss/cost trends calls into question, however, whether current reserve levels will ultimately be adequate to pay all future losses.

Factor #8: Rates of return on bonds declined and equity values fell. This affected investment earnings on newly invested assets and the expected future investment earnings that are used to offset prospective

premiums A one percent drop in interest rates can be translated into a rate increase of two to four percent. A two and one-half percent drop in interest rates, which has occurred since 2000, can translate into a rate increase of between five and ten percent.

Factor #9: Reinsurers' experience deteriorated as their results were affected by the increased claim severity and pricing changes in the early-to-mid-1990s. Many medical malpractice insurers are not large enough to take on the risks inherent in this line of insurance on their own. They require someone else (reinsurers) to share the risk. There would be less medical malpractice insurer capacity without reinsurers. Because reinsurers generally cover the higher layers of exposure, their results were disproportionately affected by claim severity increases. This, coupled with the broadly tightened reinsurance market after the events of Sept. 11, 2001, caused reinsurers to substantially increase rates and tighten terms of reinsurance for medical malpractice.

THE RATEMAKING PROCESS

Ratemaking is the term used to describe the process by which companies determine what premium is indicated for a coverage. In the insurance transaction, the company assumes the financial risk associated with a future, contingent event in exchange for a fixed premium before it knows what the true cost of the event is if any. The company must estimate those costs, determine a price for it and be willing to assume the risk that the costs may differ, perhaps substantially, from those estimates. A general principle of ratemaking is that the rate charged reflects the costs resulting from the policy and the income resulting from the anticipated policy covered losses, not what is actually paid or is going to be paid on past policies. It does not reflect money lost on old investments. In short, a rate is a reflection of future costs.

In general, the actuarial process used in making these estimations for medical malpractice insurance starts with historical loss experience for the specific coverage and, usually, for a specific jurisdiction. Rates are determined for this coverage, jurisdiction, and a fixed time period. To the appropriately projected loss experience, a company must incorporate consideration of all expenses, the time value of money and an appropriate provision for risk and profit associated with the insurance transaction.

For a company already writing a credible volume of the coverage in a state, the indications of the adjusted ultimate loss experience can be compared to its current premiums to determine a change. For a company entering the line or state for the first time, obtaining credible data to determine a proper premium is often difficult and, sometimes, not possible. In the latter situation, the risk of being wrong is increased significantly.

Additionally, some lines of insurance coverage are more predictable than other lines. The unpredictability of coverage reflects its inherent risk characteristics. Most companies would agree that costs and, therefore, rates for automobile physical damage coverage, for example, are more predictable than for medical malpractice insurance because automobile insurance is relatively high frequency/low severity coverage compared to medical malpractice insurance. In the case of auto physical damage, one has a large number of similar claims for relatively small amounts that fall in a fairly narrow range. In medical malpractice insurance, one has a small number of unique claims that have a much higher average value and a significantly wider range of possible outcomes. There also is significantly longer delay for medical malpractice insurance between the occurrence of an event giving rise to a claim, the reporting of the claim, and the final disposition of the claim. This longer delay adds to the uncertainty inherent in projecting the ultimate value of losses, and consequently premiums.

The following facts explain the ratemaking process:

1. Historical loss experience is collected in coverage year detail for the last several years. This usually will include paid and outstanding losses and counts. The data is reviewed for reasonableness and consistency, and estimates of the ultimate value of the coverage-year loss are developed using actuarial techniques.

2. Ultimate losses are adjusted to the prospective level (i.e., the period for which rates are being made). This involves an appropriate adjustment for changes in average costs and claim frequencies (called trend). Adjustments also would be made for any changes in circumstances that may affect costs (e.g., if a coverage provision has been altered).

3. Adjusted ultimate losses are compared to premium (or doctor counts) to determine a loss ratio (or loss cost per doctor) for the prospective period.

4. Expenses associated with the business must be included. These are underwriting and general expenses (review of application, policy issuance, accounting, agent commission, premium tax, etc.) Other items to consider are the profit and contingency provision, reinsurance impact, and federal income tax.

5. A final major component of the ratemaking process is consideration of investment income. Typically for medical malpractice insurance, a payment pattern and anticipated prospective rate of return are used to estimate a credit against the otherwise indicated rate.

These five steps, applied in a detailed manner and supplemented by experienced judgment, are the standard roadmap followed in developing indicated rates. There are a number of other issues to address in establishing the final rates to charge. These include recognizing differences among territories within a state, limits of coverage, physician specialty, and others. The final rates will reflect supplemental studies of these various other aspects of the rate structure.

Many states have laws and regulations about how premium rates can be set and what elements can or must be included. The state regulators usually have the authority to regulate that insurance premium rates are not excessive, inadequate, or unfairly discriminatory. It is not uncommon for state insurance regulators to review the justification for premium rates in great detail and, if deemed necessary, to hold public hearings with expert testimony to examine the basis for the premium rates. In many states, the insurance regulator has some authority to restrict the premium rates that insurance companies can charge.

FREQUENT MISCONCEPTIONS

In closing, it may be helpful to address some frequent misconceptions about the insurance industry and medical malpractice insurance coverage.

Misconception 1: "Insurers are increasing rates because of investment losses, particularly their losses in the stock market."

As we have pointed out, investment income plays an important role in the overall financial results of

insurers, particularly for insurers of medical professional liability, because of the long delay between payment of premium and payment of losses. Insurers are restricted in their investment activity due to state insurance regulation and competition in the market. The majority of invested assets are fixed-income instruments. Generally, these are purchased in maturities that are reasonably consistent with the anticipated future payment of claims. Losses from this portion of the invested asset base have been minimal, although the rate of return available has declined.

Equities are a much smaller portion of the portfolio for this group, representing about 15 percent of invested assets. After favorable performance up through the latter 1990s, there has been a decline in the last few years, contributing to less favorable investment results and overall operating results. Investment returns are still positive, but the rates of return have been adversely affected somewhat by equity declines and more so by lower fixed-income investment yields.

In establishing rates, insurers do not recoup investment losses. Rather, the general practice is to choose an expected prospective investment yield and calculate a discount factor based on historical payout patterns. The insurer expects to have an underwriting loss that will be offset by investment income. Since interest yields drive this process, when interest yields decrease, rates must increase.

Misconception 2: "Companies operated irresponsibly and caused the current problems."

Financial results for medical liability insurers have deteriorated. Some portion of these adverse results might be attributed to inadequate knowledge about rates in newly entered markets and to being too competitive in offering premium discounts on existing business. However, decisions related to these actions were based on expectations that recent loss and investment markets would follow the same

relatively stable patterns reflected in the mid-1990s. As noted earlier, these results also reflect favorable reserve development from prior coverage years or, in other words, "good news on old business." Unfortunately, the environment unexpectedly changed on several fronts — loss/cost levels increased, in several states significantly; the favorable reserve development ceased; investment yields declined; and reinsurance costs jumped. Today's rate increases reflect a reconciliation of rates to current loss and reinsurance cost levels, given available interest yields. The "current problem" reflects current data.

Misconception 3: "Companies are reporting losses to justify increasing rates."

This is a false observation. Companies are reporting losses primarily because claim experience is worse than anticipated when prices were set. Further, it would seem illogical that companies would have reported profitable results during most of the 1990s and, at the end of the decade, decide to report unsupported losses in an effort to justify higher rates. Several companies have suffered serious adverse consequences given these financial results, including liquidation or near liquidation. Phico, MIIX, Frontier and, most recently, the Reciprocal of America, are all companies forced out of the business and in run-off due to underwriting losses. Further, the St. Paul Cos., formerly the largest writer of medical malpractice insurance, are now in the process of withdrawing from the medical liability insurance market. One reason for this decision is an expressed belief that the losses are too unpredictable to continue to write the business.

The Academy appreciates the opportunity to provide an actuarial perspective on these important issues and would be glad to provide the subcommittee with any additional information that might be helpful.